Winter \*\*

#### Flood Control Project Maintenance Levee Inspections

#### **LMA District Cover Sheet**

**Spring 2019 Levee Inspection Results** 

#### **Reclamation District No. 1602 Del Puerto**

Spring

Summer \*\*

Fall

	(March - May)	(June - August)	(September - November)	(December - February)						
† Overall LMA Rating (Fall Only)										
	** Non-receipt of Summ Reports may effect or									
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not detern			ual maintenance						
<u>FALL INSPECTIONS:</u> The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.										
Comments										

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Left	6.24

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/16/2019 - 4/16/2019			
DWR Inspector	Corey Fujitani			
Accompanied By	Tony Martinez RD 1602			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.00	Rating **	Α	Issue No.		39	
LM End	0.00	Issue Type +	Ma	Location * N/A			
Catagoni	Earthen L	evee		GPS La	atitud	e/Longitude	
Category		Start		End			
Item		s & Maintena	nce		0		0
пеш	<sup>n</sup> Manuals				0		0
DWR ID	DWR_RD1						
		Comn	nent Cod	le			
		Inspecto	or Comm	nent			
The LMA h	nas all the	O&M manuals	S.				

No Photos

LM Start	0.00	Rating **	Α	Issue No.		77		
LM End	0.00	Issue Type +	Ma	Location *	N/A			
Category	GPS La	atitud	e/Longitude					
Calegory	Category					End		
Item	Emergency Supplies &				0		0	
пеш	Equipmer	nt			0		0	
DWR ID	DWR ID DWR_RD1602_01_s _ 2012_77							
	Comment Code							

No Photos

Inspector Comment
The LMA has enough flood materials in case of an incident.

LM Start	0.00	Rating **	Α	Issue No.		97	
LM End	0.00	Issue Type +	Ma	Location *	N/A		
Category Earthen Levee			GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	Flood Pre	paredness &		0		0	
пеш					0		0
DWR ID	DWR_RD1	602_01_s _ 201	2_97				
	Comment Code						
							Т

No Photos

#### Inspector Comment

The LMA has solid understanding of flood fight techniques and most of the staff have flood preparedness training. They will have more training this year with other districts.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.09	Rating **	М	Issue No.		60	
LM End	0.11	Issue Type +	Ma	Location * LS			
Category	Earthen L	.evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.4771	61 °	37.477299°	
пеш				-121.0825	04°	-121.082084 °	
DWR ID DWR_RD1602_01_s _ 2018_60							
		Comn	nent Cod	le			
T1: Trim t	rees to at	least five feet	above g	round level.			
		Inspecto	or Comm	nent			



Looking upstream at trees on landward slope.

LM Start	0.13	Rating **	М	Issue No.		108
LM End	0.56	Issue Type +	Ma	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Vegetatio	n		37.47723	2°	37.480281 °
item				-121.08185	6°	-121.075095 °
DWR ID DWR_RD1602_01_f _ 2018_108						
			. ^			

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	0.13	Rating **	М	Issue No.	109			
LM End	0.55	Issue Type +	Ma	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Vegetation			37.47723	86°	37.480261	0	
item				-121.0818	54 °	-121.075148	0	
DWR ID	DWR_RD1	602_01_f _ 201	8_109					
Comment Code								

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.18	Rating **	М	Issue No.		20	
LM End	0.18	Issue Type +	Ma	Location *	LS		
Catagoni Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Animal Co	ontrol		37.477575°		37.477575 °	
Item				-121.080943 °		-121.080943 °	
DWR ID DWR_RD1602_01_f _ 2016_20							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	0.20	Rating **	М	Issue No.		28
		I T	N.4 -	1 *		
LM End	0.20	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		37.4777	06 °	37.477706°
пеш				-121.0806	74 °	-121.080674°
DWR ID	DWR RD1	602 01 f 201	5 28			

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

LM Start 0.20		Rating ** M		Issue No.	28 (cont)	
LM End	0.20	Issue Type +	Ma	Location *	WS	

#### Photo 1 of 2: SP\_2019\_RD1602\_110\_28\_20190307\_00007.jpg



Updated picture of the rodent hole on the waterside of the levee during spring 2016 inspection.

Photo 2 of 2: SP\_2019\_RD1602\_110\_28\_20190307\_00008.jpg



A rodent hole was found on the waterside of the levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.26	Rating **	М	Issue No.	29		
LM End	0.26	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
			Start		End		
Item	Animal Co	ontrol		37.478138°		37.478138 °	
пеш				-121.079810 °		-121.079810 °	
DWR ID DWR_RD1602_01_f _ 2017_29							
Comment Code							
A 0 A 1		In the standard				1 1600 1	

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment





View of a rodent hole on the waterside of the levee. Fall 2017

Photo 2 of 2: SP\_2019\_RD1602\_110\_29\_20190307\_00010.jpg



Looking at typical rodent holes on waterward slope. (Spring 2018)

LM Start	0.47	Rating **	М	Issue No.		31	
LM End	0.47	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory		Start		End			
Animal Control				37.4796	59°	37.479659°	
пеш				-121.076419 °		-121.076419°	
DWR ID	DWR_RD1	602_01_f _ 201	5_31				
		Comn	nent Cod	de			
A3 : No ro compact of		le, but rodent rows.	burrows	visible; ne	ed to	backfill and	
		Inspect	or Comm	nent			
1							

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.50	Rating **	М	Issue No.		110			
LM End	0.50	Issue Type +	Ma	Location *	LS				
Category	evee	GPS La	atitud	le/Longitude					
Category	Calegory					End			
Item	Animal Control			37.4798	99°	37.479899 °			
пеш				-121.075930 °		-121.075930 °			
DWR ID	DWR_RD1	602_01_f _ 201	8_110						
		Comn	nent Cod	le					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.									
	Inspector Comment								

No Photos

LM Start	0.58	Rating **	A/W	Issue No.	ssue No. <b>200</b>	
LM End	0.58	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start	End	
Item	DWR UC	IP LMA Respo	onsibility	37.48018	2°	37.480182 °
item				-121.07476	5°	-121.074765 °
DWR ID	20215					

#### Comment Code

#### Inspector Comment

FS\_ID:51325 DS\_ID:20215 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed a cover has been added to the CMP riser. (O. Magana - DWR UCIP)10/01/2013 Open 60-inch CMP riser on WS needs lid as it's depth may be a hazard to the public. (W. Wylie - DWR

FIELD\_STRUCT\_DESC: 16-inch steel drainage pipe through levee, 11.3 feet below crown. Slide gate in 60-inch corrugated metal pipe (CMP) riser located on the waterside (WS). Concrete inlet is approximately 110 feet west of the levee crown or 110 feet off landside (LS) toe next to roadway. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784].

FS Date: 11/18/2016

#### Photo 1 of 3: UCIP\_SP\_2019\_51325\_36702.jpg



60-inch CMP riser on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.58	Rating **	A/W	Issue No.		200 (cont)	
LM End	0.58	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	titud	e/Longitude	
Calegory						End	
Item	DWR UC	IP LMA Respo	nsibility	37.48018	2°	37.480182	0
пеш				-121.07476	5 °	-121.074765	0
DWR ID	20215						

#### Comment Code

#### Inspector Comment

FS\_ID:51325 DS\_ID:20215 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed a cover has been added to the CMP riser. (O. Magana - DWR UCIP)10/01/2013 Open 60-inch CMP riser on WS needs lid as it's depth may be a hazard to the public. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 16-inch steel drainage pipe through levee, 11.3 feet below crown. Slide gate in 60-inch corrugated metal pipe (CMP) riser located on the waterside (WS). Concrete inlet is approximately 110 feet west of the levee crown or 110 feet off landside (LS) toe next to roadway. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784].

FS Date: 11/18/2016

LM Start	<b>0.58</b> Rating *		A/W Issue No.		200 (cont)
LM End	0.58	Issue Type +	Ma	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_51325\_36701.jpg



CMP riser with slide gate on WS shoulder.

#### Photo 3 of 3: UCIP\_SP\_2019\_51325\_36700.jpg



Damaged Wooden lid on WS toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.58	Rating **	М	Issue No.		201
LM End	0.58	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		37.48017	6°	37.480176°
пеш					3°	-121.074736°
DWR ID	24681					

# Comment Code

#### Inspector Comment

FS\_ID:22937 DS\_ID:24681 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/01/2013 No permit identified for this crossing. (W.

Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: Communications line of an unknown size or

material through the levee, at an unknown depth.

FS Date: 10/1/2013

LM Start	0.58	Rating **	М	Issue No.	201 (cont)
LM End	0.58	Issue Type +	En	Location *	





Communication line access box on LS shoulder.

Photo 2 of 3: UCIP\_SP\_2019\_22937\_39049.jpg



Communication line access box on LS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.58	Rating **	М	Issue No.	:	201 (cont)
LM End	0.58	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start E		End
Item	DWR UC	IP Field Study		37.48017	S°	37.480176
пеш			_		o°	-121.074736
DWR ID	24681					

#### Comment Code

#### Inspector Comment

FS\_ID:22937 DS\_ID:24681 EP\_NO: N/A

Repair Type: Non-Urgent

Crossing Status: Found UCIP Comments: 10/01/2013 No permit identified for this crossing. (W.

Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: Communications line of an unknown size or

material through the levee, at an unknown depth.

FS Date: 10/1/2013



Communication line marker on LS shoulder.

LM Start	0.59	Rating **	М	Issue No.	118		
LM End	2.18	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory			Start End			End	
Item	Vegetatio	n		37.48008	37°	37.470256°	
пеш						-121.055893 °	
DWR ID DWR_RD1602_01_s _ 2019_118							
Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	U · Unaccentable	A/W · Acceptable but Monitor & Maintain	En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.59	Rating **	М	Issue No.		114	
LM End	2.80	Issue Type +	Ма	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	n		37.4800	87°	37.466784	
Item				-121.074685 °		-121.046328	
DWR ID	DWR_RD1	602_01_s _ 201	9_114				
		Comn	nent Cod	le			
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slop	oes a	and	
easements	S.						
	Inspector Comment						

No Photos

LM Start	0.60	Rating **	М	Issue No.		70
LM End	0.71	Issue Type +	En	Location *		WS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End	
Item	Encroach	ments		37.4799	67°	37.478514°
пеш				-121.0745	82 °	-121.073435 °
DWR ID	DWR_RD1	602_01_s _ 201	2_70			

#### Comment Code

FE : Fence

#### Inspector Comment

Barbed wire fence along the landward toe.

## Photo 1 of 1 : SP\_2019\_RD1602\_110\_70\_20190307\_00044.jpg



View of barbed wire fence at landward toe looking upstream.

LM Start	0.63	Rating **	М	Issue No.		107	
LM End	0.63	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				titud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		37.4795	69°	37.479569	c
пеш				-121.0742	99°	-121.074299	c
DWR ID	DWR_RD1	602_01_f _ 201	8_107				_
		Comn	nent Coc	le			

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.64	Rating **	М	Issue No.		30		
LM End	0.64	Issue Type +	Ma	Location *	WS			
Category	Earthen L	evee		GPS La	tituc	le/Longitude		
Calegory				Start		End		
Item	Animal Co	ontrol		37.47939	91 °	37.479391 °		
item				-121.07416	88°	-121.074168 °		
DWR ID DWR_RD1602_01_f _ 2017_30								
		Comn	nent Coo	le				
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	d to	backfill and		
		Inspecto	or Comm	ent				



View of rodent holes on the waterside slope of the levee. Fall 2017

LM Start	0.69	Rating **	М	Issue No.	121		
LM End	0.98	Issue Type +	Ma	Location *	CR		
Category	.evee	GPS Latitude/Longitude					
Calegory		Start		End			
Item	Vegetatio		37.47879	98°	37.478706 °		
пеш				-121.0737	53 °	-121.069080 °	
DWR ID	DWR ID DWR_RD1602_01_s _ 2019_121						
Comment Code							
V9 : Keep	V9 : Keep the crown roadway free of vegetation.						

Inspector Comment

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.77	Rating **	A/W	Issue No.	202		
LM End	0.77	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	37.4779	93 °	37.477993 °	
пеш				-121.0726	45 °	-121.072645°	
DWR ID	20216						
	Comment Code						

#### Inspector Comment

FS\_ID:51634 DS\_ID:20216 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed the debris blocking the outlet has been cleared. (O. Magana - DWR UCIP)10/01/2013 Flap gate blocked from functioning by soil buildup on WS toe. Soil should be cleared. (W. Wylie - DWR UCIP)

FIÉLD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 14.4 feet below crown. Concrete "U" headwall on the waterside (WS) and landside (LS) ends. Slide gate in 6-foot by 7-foot concrete surge box is located on the WS shoulder. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.78), Drawing No. 7-4-1784].

FS Date: 11/18/2016

LM Start	0.77	Rating **	A/W	Issue No.	202 (cont)
LM End	0.77	Issue Type +	Ma	Location *	

# Photo 1 of 3 : UCIP\_SP\_2019\_51634\_36723.jpg

Inlet on LS toe

#### Photo 2 of 3: UCIP\_SP\_2019\_51634\_36722.jpg



Slide gate in concrete box on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	0.77	Rating **	A/W	Issue No.		202 (cont)	
LM End	0.77	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	37.47799	3°	37.477993 °	
Item				-121.07264	5 °	-121.072645 °	
DWR ID	20216						

#### Comment Code

#### Inspector Comment

FS\_ID:51634 DS\_ID:20216 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to No Action Needed the debris blocking the outlet has been cleared. (O. Magana - DWR UCIP)10/01/2013 Flap gate blocked from functioning by soil buildup on WS toe. Soil should be cleared. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 14.4 feet below crown. Concrete "U" headwall on the waterside (WS) and landside (LS) ends. Slide gate in 6-foot by 7-foot concrete surge box is located on the WS shoulder. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.78), Drawing No. 7-4-1784].

FS Date: 11/18/2016



Concrete inlet on LS toe.

LM Start	1.00	Rating **	М	Issue No.	36		
LM End	1.00	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroach	ments		37.47881	0 °	37.478810 °	
пеш				-121.06873	88°	-121.068738 °	
DWR ID DWR_RD1602_01_s _ 2012_36							
	Comment Code						

RA: Ramp

Inspector Comment

#### Photo 1 of 1: SP\_2019\_RD1602\_110\_36\_20190307\_00014.jpg



View of the ramp on the crown. The picture was taken from crown looking downstream.

+ Issue Type

Ma : Maintenance Deficiency

Oh : Design & System Obselv

Ob : Design & System Obsolescence En : Enforcement

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#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.00	Rating **	М	Issue No.		203	
LM End	1.00	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	37.47881	6°	37.478816	٥
пеш				-121.06878	0°	-121.068780	0
DWR ID	20217						

#### Comment Code

#### Inspector Comment

FS\_ID:51636 DS\_ID:20217 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS but pipe is currenly not connected to pump. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned and if so should be done so properly. Flapgate missing. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 1 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pumps on the pump platform are located on the landside (LS). Siphon breaker in 24-inch corrugated metal pipe (CMP) riser is located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784]. FS Date: 11/18/2016

LM Start	1.00	Rating **	М	Issue No.	203 (cont)
LM End	1.00	Issue Type +	Ма	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_51636\_36758.jpg



Pumping plant on LS toe. Pipe visible under walkway.

#### Photo 2 of 3: UCIP\_SP\_2019\_51636\_36757.jpg



Siphon breaker in 24-inch CMP riser on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.00	Rating **	М	Issue No.	203 (cont)			
LM End	1.00	Issue Type +	Ма	Location *				
Category	Suppleme	atitud	le/Longitude					
Calegory	Star					End		
Item	DWR UC	IP LMA Respo	nsibility	37.4788	16°	37.478816 °		
пеш				-121.0687	80°	-121.068780 °		
DWR ID	ID 20217							
	Comment Code							

#### Inspector Comment

FS\_ID:51636 DS\_ID:20217 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 11/18/2016

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS but pipe is currenly not connected to pump. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned and if so should be done so properly. Flapgate missing. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 1 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pumps on the pump platform are located on the landside (LS). Siphon breaker in 24-inch corrugated metal pipe (CMP) riser is located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784].



Siphon breaker in 24-inch CMP riser on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.00	Rating **	М	Issue No.		204
LM End	1.00	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	37.47881	7 °	37.478817 °
пеш				-121.06877	3°	-121.068773 °
DWR ID	20219					

#### Comment Code

#### Inspector Comment

FS\_ID:51637 DS\_ID:20219 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned siphon breakers covered in soil and flapgate missing. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 2 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pump on pump platform located on the landside (LS). Siphon breaker in 24-inch riser located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784].

LM Start	1.00	Rating **	М	Issue No.	204 (cont)
LM End	1.00	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_51637\_36772.jpg



Pipe visible under walkway at puming plant on LS toe.



Siphon breaker covered in soil at CMP riser on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.00	Rating **	М	Issue No.		204 (cont)
LM End	1.00	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.47881	7 °	37.478817°
пеш				-121.06877	3°	-121.068773 °
DWR ID	20219					

#### Comment Code

#### Inspector Comment

FS\_ID:51637 DS\_ID:20219 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent a flap gate has been added to the WS. According to Tony Martinez, LMA representative, this crossing is currently not in use. Owner will need to coordinate with CVFPB to obtain permit. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned siphon breakers covered in soil and flapgate missing. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: \*ABANDONED\* 2 of 2: 16-inch steel drainage pipe through levee, 17 feet below crown. Pump on pump platform located on the landside (LS). Siphon breaker in 24-inch riser located on the waterside (WS) shoulder. Concrete "U" headwall and flap gate are located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.01), Drawing No. 7-4-1784].

### Photo 3 of 3: UCIP\_SP\_2019\_51637\_36770.jpg



Concrete headwall on WS toe with missing flapgate.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.02	Rating **	U	Issue No.		205
LM End	1.02	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.47877	9°	37.478779°
пеш				-121.06850	8 °	-121.068508 °
DWR ID	20218					

#### Comment Code

#### Inspector Comment

FS\_ID:53521 DS\_ID:20218 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/19/2018 Pipe remains the same. WS concrete headwall is still detached with vertical erosion on the WS slope. Dense vegetation along pipe alignment made it dificult to inspect levee slopes and identify any potential issues present at this site. Recommend clearing vegetation along pipe alignment to be able to conduct a proper UCIP inspection. This crossing is part of DWR's Flood System Repair Project (FSRP) and Deferred Maintenance Project (DMP). Crossing will be monitored to identify progress of erosion on the WS slope. Crossing remains Urgent due to the detachment of the concrete wall and vertical cut on the WS. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection headwall on the WS toe has seperated from pipe and flap gate is still missing. Erosion around concrete headwall and undermined WS slope are visible from WS. The slope undermined appears to have progressed but no photos were taken due to the dense vegetation covering area. According to Tony Martinez, LMA representative, the WS concrete headwall has been detached since 2008/2009. LMA has been in contact with CVFPB, DWR, and USACE regarding this site. (O. Magana - DWR UCIP)10/01/2013 Headwall on WS toe seperated from pipe. Erosion around concrete headwall and undermined at WS toe. Flap gate missing from WS toe headwall. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 25.4 feet below crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in concrete surge box located on the WS slope. A 5-foot by 5-foot concrete box is located on LS toe. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.02), Drawing No. 7-4-1784]. FS Date: 10/19/2018 10:23:00 AM

#### Photo 1 of 3: UCIP\_SP\_2019\_53521\_36786.jpg



Grated inlet and 5'X5' concrete box on LS toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.02	Rating **	U	Issue No.		205 (cont)
LM End	1.02	Issue Type +	Ma	Location *		
Category	Suppleme	ental	le/Longitude			
Calegory	Ty .			Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.47877	'9 °	37.478779°
пеш				-121.06850	)8 °	-121.068508 °
DWR ID 20218						
		Comn	nent Cod	le		

# Inspector Comment

FS\_ID:53521 DS\_ID:20218 EP\_NO: N/A

Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/19/2018 Pipe remains the same. WS concrete headwall is still detached with vertical erosion on the WS slope. Dense vegetation along pipe alignment made it dificult to inspect levee slopes and identify any potential issues present at this site. Recommend clearing vegetation along pipe alignment to be able to conduct a proper UCIP inspection. This crossing is part of DWR's Flood System Repair Project (FSRP) and Deferred Maintenance Project (DMP). Crossing will be monitored to identify progress of erosion on the WS slope. Crossing remains Urgent due to the detachment of the concrete wall and vertical cut on the WS. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection headwall on the WS toe has seperated from pipe and flap gate is still missing. Erosion around concrete headwall and undermined WS slope are visible from WS. The slope undermined appears to have progressed but no photos were taken due to the dense vegetation covering area. According to Tony Martinez, LMA representative, the WS concrete headwall has been detached since 2008/2009. LMA has been in contact with CVFPB, DWR, and USACE regarding this site. (O. Magana - DWR UCIP)10/01/2013 Headwall on WS toe seperated from pipe. Erosion around concrete headwall and undermined at WS toe. Flap gate missing from WS toe headwall. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 25.4 feet below crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in concrete surge box located on the WS slope. A 5-foot by 5-foot concrete box is located on LS toe. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.02), Drawing No. 7-4-1784]. FS Date: 10/19/2018 10:23:00 AM



Grated inlet at LS toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.02	Rating **	U	Issue No.		205 (cont)	
LM End	1.02	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	de/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	37.47877	9°	37.478779°	
пеш				-121.06850	8°	-121.068508°	
DWR ID	20218						

# Comment Code

#### Inspector Comment

FS\_ID:53521 DS\_ID:20218 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/19/2018 Pipe remains the same. WS concrete headwall is still detached with vertical erosion on the WS slope. Dense vegetation along pipe alignment made it dificult to inspect levee slopes and identify any potential issues present at this site. Recommend clearing vegetation along pipe alignment to be able to conduct a proper UCIP inspection. This crossing is part of DWR's Flood System Repair Project (FSRP) and Deferred Maintenance Project (DMP). Crossing will be monitored to identify progress of erosion on the WS slope. Crossing remains Urgent due to the detachment of the concrete wall and vertical cut on the WS. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection headwall on the WS toe has seperated from pipe and flap gate is still missing. Erosion around concrete headwall and undermined WS slope are visible from WS. The slope undermined appears to have progressed but no photos were taken due to the dense vegetation covering area. According to Tony Martinez, LMA representative, the WS concrete headwall has been detached since 2008/2009. LMA has been in contact with CVFPB, DWR, and USACE regarding this site. (O. Magana - DWR UCIP)10/01/2013 Headwall on WS toe seperated from pipe. Erosion around concrete headwall and undermined at WS toe. Flap gate missing from WS toe headwall. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 25.4 feet below crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in concrete surge box located on the WS slope. A 5-foot by 5-foot concrete box is located on LS toe. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 1.02), Drawing No. 7-4-1784]. FS Date: 10/19/2018 10:23:00 AM



Slide gate in concrete riser next to shed on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.03	Rating **	U	Issue No.		120			
LM End	1.61	Issue Type +	Ma	Location *		CR			
Category	Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End				
Item	Vegetation			37.4787	30°	37.477677°			
пеш				-121.0683	33 °	-121.058740 °			
DWR ID DWR_RD1602_01_s _ 2019_120									
	Comment Code								

V9 : Keep the crown roadway free of vegetation.

#### Inspector Comment



View of vegetation on crown looking upstream. (Spring 2019)

LM Start	1.05	Rating **	М	Issue No.		2	
LM End	1.05	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.4785	67°	37.478567	٥
item				-121.0678	47 °	-121.067847	٥
DWR ID	RD1602U0	1RM97.68					

# Comment Code Inspector Comment

09/20/2017: The erosion was discovered during the spring levee inspection. The size of the erosion is roughly estimated due to dense vegetation at the site. [2017 Site ID:RD1602U01RM97.68]

LM Start	1.05	Rating **	М	Issue No.	2 (cont)
LM End	1.05	Issue Type +	Ma	Location *	WS

#### Photo 1 of 4 : SP\_2019\_RD1602\_110\_2\_20190307\_00001.jpg



Close view of the erosion. The erosion is covered by dense vegetation at the site.

Photo 2 of 4 : SP\_2019\_RD1602\_110\_2\_20190307\_00002.jpg



Close view of the erosion.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.05	Rating **	М	Issue No.		2 (cont)
LM End	1.05	Issue Type +	Ma	Location *		WS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR Ero	sion Survey		37.4785	67°	37.478567
пеш				-121.0678	47 °	-121.067847
DWR ID	RD1602U0	1RM97.68				

#### Comment Code

#### Inspector Comment

09/20/2017: The erosion was discovered during the spring levee inspection. The size of the erosion is roughly estimated due to dense vegetation at the site. [2017 Site ID:RD1602U01RM97.68]

LM Start	1.05	Rating **	М	Issue No.	2 (cont)
LM End	1.05	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : SP\_2019\_RD1602\_110\_2\_20190307\_00003.jpg



Looking up at the erosion from the levee toe.

Photo 4 of 4: SP\_2019\_RD1602\_110\_2\_20190307\_00004.jpg



Close view of the erosion.

LM Start	1.19	Rating **	М	Issue No.	32		
LM End	1.19	Issue Type +	Ma	Location *	WS		
Catagony	GPS La	atitud	e/Longitude				
Calegory	Category				Start		
Item	Animal Co	ontrol		37.4783	47°	37.478347	0
пеш	item				61 °	-121.065361	0
DWR ID	DWR_RD1602_01_f _ 2017_32						
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.57	Rating **	M	Issue No.		33	
LM End	1.57	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachments				13°	37.478113 °	
item			-121.059287 °		-121.059287 °		
DWR ID	DWR_RD1	602_01_f _ 201	7_33				
		Comn	nent Cod	le			
TR : Tree	or limb						
		Inspecto	or Comm	nent			



View of prunings on the landside of the levee.

LM Start	1.61	Rating **	М	Issue No.		43
LM End	2.22	Issue Type +	En	Location *		LS
Category	Earthen L	evee	GPS La	titud	e/Longitude	
Calegory				Start		End
Item	Encroach	ments		37.47766	63°	37.470125 °
пеш	item				16°	-121.055244°
DWR ID	DWR_RD1	602_01_s _ 201	2_43			·

#### Comment Code

FE : Fence

#### Inspector Comment

Fence at the landside toe of the levee.



View of the fence on the landside toe of the levee. The picture was taken from crown looking upstream.

LM Start	1.65	Rating **	U	Issue No.	80	
LM End	1.65	Issue Type +	En	Location *	LS	
Category	evee	GPS La	titud	le/Longitude		
Calegory				Start		End
Item	Encroach	ments		37.47721	8 °	37.477218°
пеш				-121.05850	)5 °	-121.058505 °
DWR ID	DWR_RD1602_01_s _ 2018_80					
Comment Code						

TR: Tree or limb

#### Inspector Comment

Broken tree branch on landward slope and toe.

#### Photo 1 of 2 : SP\_2019\_RD1602\_110\_80\_20190307\_00047.jpg



Looking at broken branch on landward slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	1.65	Rating **	U	Issue No.	ssue No. 80 (cont)		
LM End	1.65	Issue Type +	En	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory	ategory					End	
Item	Encroach	ments		37.47721	8 °	37.477218°	
пеш				-121.05850	)5 °	-121.058505 °	
DWR ID	DWR ID DWR_RD1602_01_s _ 2018_80						
Comment Code							

TR: Tree or limb

Inspector Comment

Broken tree branch on landward slope and toe.



Looking downstream at broke branch on landward slope and toe.

LM Start	1.75	Rating **	M	Issue No.		119
LM End	1.77	Issue Type +	Ma	Location *	CR	
Category	evee	GPS Latitude/Longitude				
Calegory	Category					End
Item	Vegetatio	n		37.47583	33°	37.475561 °
пеш	item				72 °	-121.057959°
DWR ID	DWR_RD1	602_01_s _ 201	9_119			

Comment Code

V9 : Keep the crown roadway free of vegetation.

Inspector Comment

No Photos

LM Start	1.80	Rating **	М	Issue No.	104		
LM End	1.80	Issue Type +	En	Location *	LS		
Category	evee	GPS La	titud	e/Longitude			
Category				Start		End	
Item	Encroach	ments		37.47511	0°	37.475110°	
пеш				-121.05792	25 °	-121.057925°	
DWR ID	DWR_RD1	602_01_f _ 201					
Comment Code							

PR : Prunings

Inspector Comment

Tree limbs on landside toe.



tree limbs on landside toe. (Fall 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	2.03	Rating **	М	Issue No.		45	
LM End	2.03	Issue Type +	En	Location *		LS	
Catagoria Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Encroach	ments		37.4717	34°	37.471734°	
пеш				-121.0576	70°	-121.057670 °	
DWR ID	DWR ID DWR_RD1602_01_s _ 2012_45						
Comment Code							

EQ : Equipment

Inspector Comment

A well is present at the toe of the landside of the slope.



A well is located at the landside toe of the levee. The picture was taken from the crown looking toward the landside of the levee.

LM Start	2.19	Rating **	М	Issue No.		101
LM End	2.19	Issue Type +	En	Location *		LS
Earthen Levee			GPS Latitude/Longitude			
Category				Start		End
Item	Encroach	ments		37.4702	10°	37.470210 °
item					83 °	-121.055683 °
DWR ID DWR_RD1602_01_f _ 2018_101					·	

PR : Prunings

Inspector Comment

Comment Code

Tree limb on landside slope.



pruning pile at landside toe. (Fall 2018)

LM Start	2.27	Rating **	М	Issue No.	Issue No.			
LM End	2.27	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS La	titud	e/Longitude		
Category				Start		End		
Item	Trim / Thi	n Trees		37.47025	8°	37.470258	c	
пеш				-121.05439	92 °	-121.054392	c	
DWR ID	DWR_RD1	602_01_s _ 201	9_117					
	Comment Code							

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	2.29	Rating **	М	Issue No.		79
LM End	2.29	Issue Type +	Ma	Location *		WS
Earthen Levee			GPS Latitude/Longitude			
Category	огу			Start		End
Item	Animal Co	ontrol		37.4703	48 °	37.470348°
пеш				-121.0539	87 °	-121.053987 °
DWR ID	DWR ID DWR_RD1602_01_s _ 2017_79					
Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	2.42	Rating **	М	Issue No.		115					
LM End	2.80	Issue Type +	Ma	Location *	LS						
Category Earthen Levee				GPS Latitude/Longitude							
Calegory				Start		End					
Itom	Vegetatio	n		37.47024	5°	37.466783	•				
Item		-121.05167	1 °	-121.046329	•						
DWR ID DWR_RD1602_01_s _ 2019_115											
		Comn	ant Can	Commant Code							

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	2.56	Rating **	М	Issue No.		81	
LM End	2.56	Issue Type +	Ma	Location *		WS	
Catagoria Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		37.4692	68°	37.469268	0
пеш				-121.0494	13 °	-121.049413	0
DWR ID	DWR_RD1	602_01_s _ 201	7_81				

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of a rodent hole on the waterside slope of the levee.

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

\* Rating

A: Acceptable

M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	2.60	Rating **	М	Issue No.		116			
LM End	2.80	Issue Type +	Ma	Location *		CR			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Vegetatio	n		37.4689	28 °	37.466783°			
пеш				-121.0489	95 °	-121.046329°			
DWR ID	DWR_RD1	602_01_s _ 201	9_116						
		Comn	nent Cod	le					
V9 : Keep	the crown	roadway free	of veget	ation.					
		Inspecto	or Comm	nent					

No Photos

LM Start	2.78	Rating **	A/W	Issue No.		98	
LM End	2.78	Issue Type +	Ma	Location *	WS		
Cotogon Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Erosion / Bank Caving			37.466997°		37.466997°	
пеш				-121.0466	06°	-121.046606 °	
DWR ID	DWR_RD1	602_01_f _ 201	8_98				
	Comment Code						

#### Inspector Comment

erosion spot at waterside toe

LM Start	2.78	Rating **	A/W	Issue No.	98 (cont)
LM End	2.78	Issue Type +	Ma	Location *	WS

Photo 1 of 2: SP\_2019\_RD1602\_110\_98\_20190307\_00061.jpg



erosion at waterside toe. (Fall 2018)

Photo 2 of 2 : SP\_2019\_RD1602\_110\_98\_20190307\_00062.jpg



close up view of erosion at toe. (Fall 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	2.82	Rating **	М	Issue No.		44	
LM End	2.82	Issue Type +	Ма	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Animal Co	ontrol		37.4666	45 °	37.466645 °	
пеш				-121.04614	48 °	-121.046148 °	
DWR ID	DWR ID DWR_RD1602_01_f _ 2016_44						
Comment Code							
A 0 A 1	1 4 1 9					1 1600	

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of redoent holes on the landside of the levee.

LM Start	2.85	Rating **	М	Issue No.		46
LM End	2.85	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Animal Co	Animal Control			94°	37.466294°
ILEIII			-121.0456	93 °	-121.045693 °	
DWR ID	R ID DWR_RD1602_01_f _ 2016_46					

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	2.86	Rating **	М	Issue No.		47	
LM End	2.86	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Animal Co	ontrol		37.46616	66°	37.466166	0
пеш				-121.04552	27 °	-121.045527	0
DWR ID	DWR_RD1	602_01_f _ 201	6_47				

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of rodent holes on the waterside of the levee. Fall 2016

Ш	Location	
ı	LS: Land Side	N/A: Not Applicable
ı	WS: Water Side	
ı	CP · Crown	

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

Rating

N : Not Inspected/Rated C : Corrected

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	2.87	Rating **	С	Issue No.		96		
LM End	2.87	Issue Type +	Ma	Location *		CR		
Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Animal Co	ontrol		37.466081	0	37.466081 °		
пеш				-121.045382	٥	-121.045382°		
DWR ID DWR_RD1602_01_f _ 2018_96								

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Large rodent hole in crown and at landside toe.

No Photos

LM Start	2.89	Rating **	М	Issue No.		49	
LM End	2.89	Issue Type +	Ma	Location *		WS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Animal Co	ontrol		37.4658	98°	37.465898	٥
item				-121.0452	09°	-121.045209	٥
DWR ID	DWR RD1	602 01 f 201	6 49				

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment





View of rodent holes on the waterside slope of the levee. Spring 2017

LM Start	2.95	Rating **	М	Issue No.		51
LM End	2.95	Issue Type +	Ma	Location *		WS
Category	evee	GPS Latitude/Longitude				
Calegory		Start		End		
Item	Animal Co	ontrol		37.46519	90°	37.465190°
пеш				-121.04458	84 °	-121.044584 °
DWR ID	DWR_RD1	602_01_f _ 201	6_51			

Comment Code
A3: No rodents visible, but rodent burrows visible; need to backfill and

compact or grout burrows.

Inspector Comment



View of a rodent hole on the waterside of the levee.

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LNACtort	2.98	Rating **	М	Issue No.		95			
LM Start	2.90	realing	IVI	issue ivo.		90			
LM End	2.98	Issue Type +	Ma	Location *		LS			
Category Earthen Levee			GPS La	titud	le/Longitude				
Calegory	Category					End			
Item	Animal Co	ontrol		37.464810°		37.464810 °			
пеш				-121.0442	48 °	-121.044248 °			
DWR ID	DWR_RD1	602_01_f _ 201	8_95						
	Comment Code								
A3 : No roo	A3 : No rodents visible, but rodent burrows visible; need to backfill and								

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

No Photos

LM Start	3.14	Rating **	M	Issue No.		112		
LM End	3.49	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		37.4631	80°	37.458891 °		
item				-121.042275 °		-121.043805°		
DWR ID DWR_RD1602_01_s _ 2019_112								

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

LM Start	3.24	Rating **	M	Issue No.	94				
LM End	3.24	Issue Type +	Ma	Location *	LS				
Category Earthen Levee				GPS La	atitud	le/Longitude			
Calegory			Start		End				
Item	Animal Co	ontrol		37.461879° 37.461		37.461879 °			
пеш			-121.041519°		-121.041519 °				
DWR ID DWR_RD1602_01_f _ 2018_94									

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.27	Rating **	U	Issue No.		206		
LM End	3.27	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P Field Study		37.4615	07°	37.461507°		
пеш				-121.0416	09°	-121.041609°		
DWR ID 20204								
		Comn	nent Cod	le				

#### Inspector Comment

FS\_ID:53522 DS\_ID:20204 EP\_NO: 8193 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/19/2018 Pipe is deteriorated on the LS toe (pipe section missing at inlet). This crossing remains Urgent due to the wall deterioration at the inlet. If wall is rusted out at the inlet, need to determine the condition of the pipe section through the levee. According to the LMA representative, this crossing is no longer in use (crossing is abandoned). LMA is interested in abandoning crossing in place. LMA was referred to the CVFPB staff for direction regarding proper action under Title 23 for this crossing. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection riser cover and handle on slide gate are still missing. Crossing remains Urgent due to the pubic safety issue of the 60-inch CMP cover still missing. According to Tony Martinez, LMA representative, the condition and future use of this crossing is being evaluated. Owner will need to coordinate with CVFPB for future use requirements or proper abandonment/removal. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned, and if so should be done so properly. No handle on slide gate, no cover on CMP standpipe on WS shoulder. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through levee, 11.5 feet below crown. Slide gate in 60-inch corrugated metal pipe riser is located on the waterside (WS) slope. Pipe discharges into concretelined ditch on the landside (LS) (irrigation pipe was authorized under Automatic Board Order (ABO) issued as Permit No. 8193, 1964 - Sabatte). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784].

FS Date: 10/19/2018 10:25:00 AM



Pipe visible in concrete channel on LS toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.27	Rating **	U	Issue No.	:	206 (cont)		
LM End	3.27	Issue Type +	En	Location *				
Category	Supplemental					GPS Latitude/Longitude		
Calegory	Category					End		
Item	DWR UC	IP Field Study		37.46150	)7°	37.461507°		
пеш			-121.04160	09°	-121.041609°			
DWR ID	20204							

#### Comment Code

#### Inspector Comment

FS\_ID:53522 DS\_ID:20204 EP\_NO: 8193 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/19/2018 Pipe is deteriorated on the LS toe (pipe section missing at inlet). This crossing remains Urgent due to the wall deterioration at the inlet. If wall is rusted out at the inlet, need to determine the condition of the pipe section through the levee. According to the LMA representative, this crossing is no longer in use (crossing is abandoned). LMA is interested in abandoning crossing in place. LMA was referred to the CVFPB staff for direction regarding proper action under Title 23 for this crossing. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection riser cover and handle on slide gate are still missing. Crossing remains Urgent due to the pubic safety issue of the 60-inch CMP cover still missing. According to Tony Martinez, LMA representative, the condition and future use of this crossing is being evaluated. Owner will need to coordinate with CVFPB for future use requirements or proper abandonment/removal. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned, and if so should be done so properly. No handle on slide gate, no cover on CMP standpipe on WS shoulder. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through levee, 11.5 feet below crown. Slide gate in 60-inch corrugated metal pipe riser is located on the waterside (WS) slope. Pipe discharges into concretelined ditch on the landside (LS) (irrigation pipe was authorized under Automatic Board Order (ABO) issued as Permit No. 8193, 1964 - Sabatte). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784].

FS Date: 10/19/2018 10:25:00 AM

#### Photo 2 of 3: UCIP\_SP\_2019\_53522\_36804.jpg



Slide gate in 60-inch CMP riser on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.27	Rating **	U	Issue No.	206 (cont)			
LM End	3.27	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory			Start		End			
Itom	DWR UC	P Field Study		37.46150	)7°	37.461507°		
пеш	Item				)9°	-121.041609°		
DWR ID 20204								
		Comn	nent Cod	le				

# Inspector Comment

FS\_ID:53522 DS\_ID:20204 EP\_NO: 8193 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/19/2018 Pipe is deteriorated on the LS toe (pipe section missing at inlet). This crossing remains Urgent due to the wall deterioration at the inlet. If wall is rusted out at the inlet, need to determine the condition of the pipe section through the levee. According to the LMA representative, this crossing is no longer in use (crossing is abandoned). LMA is interested in abandoning crossing in place. LMA was referred to the CVFPB staff for direction regarding proper action under Title 23 for this crossing. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection riser cover and handle on slide gate are still missing. Crossing remains Urgent due to the pubic safety issue of the 60-inch CMP cover still missing. According to Tony Martinez, LMA representative, the condition and future use of this crossing is being evaluated. Owner will need to coordinate with CVFPB for future use requirements or proper abandonment/removal. (O. Magana - DWR UCIP)10/01/2013 Appears abandoned, and if so should be done so properly. No handle on slide gate, no cover on CMP standpipe on WS shoulder. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through levee, 11.5 feet below crown. Slide gate in 60-inch corrugated metal pipe riser is located on the waterside (WS) slope. Pipe discharges into concretelined ditch on the landside (LS) (irrigation pipe was authorized under Automatic Board Order (ABO) issued as Permit No. 8193, 1964 - Sabatte). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 0.58), Drawing No. 7-4-1784].

FS Date: 10/19/2018 10:25:00 AM



Overview of levee crown at pipe crossing.

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.32	Rating **	М	Issue No.		56		
LM End	3.32	Issue Type +	Ma	Location *		LS		
Category	Catogory Earthen Levee					GPS Latitude/Longitude		
Calegory			Start		End			
Item	Animal Control			37.4608	11°	37.460811 °		
пеш				-121.04207	78 °	-121.042078 °		
DWR ID DWR_RD1602_01_s _ 2017_56								
Comment Code								

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of rodent holes on the landside of the levee. Fall 2016

LM Start	3.34	Rating **	М	Issue No.		50
LM End	3.53	Issue Type +	En	Location *		WS
Category	Earthen Levee			GPS Latitude/Longitude		
Category				Start		End
Item	Encroachments			37.4606	44 °	37.458373
item				-121.0422	31 °	-121.044081
DWR ID	DWR_RD1	602_01_s _ 201	2_50			

Comment Code

DT : Ditch

Inspector Comment

A ditch is located on waterside toe of the levee.



A ditch was located on the waterside toe of the levee. The picture was taken from the crown looking upstream.

LM Start	3.37	Rating **	М	Issue No.		113	
LM End	3.37	Issue Type +	Ma	Location *		CR	
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory		Start		End			
Item	Crown Su	37.4602	17°	37.460217	0		
item	Rutting			-121.0425	83°	-121.042583	0
DWR ID DWR_RD1602_01_s _ 2019_113							
0 101							

Comment Code

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

* L	ocation	** R	ating		+ Issue Type	
1	LS: Land Side N/A: Not Applica	e /	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
V	/S : Water Side	l N	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
(	CR : Crown	l	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement	

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.42	Rating **	М	Issue No.		93	
LM End	3.52	Issue Type +	Ma	Location *		CR	
Category	Earthen L	evee	GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	Vegetatio		37.4597	00°	37.458458 °		
пеш				-121.0431	19°	-121.044034 °	
DWR ID	DWR_RD1	602_01_s _ 201	9_93				
		Comn	nent Coo	le			
V9 : Keep	the crown	roadway free	of veget	ation.			
Inspector Comment							

No Photos

LM Start	3.43	Rating **	М	Issue No.		57	
LM End	3.43	Issue Type +	Ma	Location *		WS	
Category	Earthen L	GPS La	atitud	le/Longitude			
Category				Start		End	
Item	Animal Control			37.4595	52°	37.459552	0
пеш				-121.0432	79°	-121.043279	0
DWR ID	DWR_RD1602_01_f _ 2017_57						

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment



View of a rodent hole on the waterside of the levee.

LM Start	3.64	Rating **	М	Issue No.		88	
LM End	3.91	Issue Type +	Ма	Location *		CR	
Earthen Levee				GPS Latitude/Longitude			
Category		Start		End			
Vegetation				37.456869°		37.453461 °	
ltem 5				-121.0447	19°	-121.042309 °	
DWR ID DWR_RD1602_01_s _ 2019_88							
Comment Code							
V9 : Keep the crown roadway free of vegetation.							

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.68	Rating **	М	Issue No.		58			
LM End	4.83	Issue Type +	Ма	Location *		WS			
Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Vegetatio	n		37.4563	62°	37.441663 °			
item				-121.0443	84 °	-121.036558 °			
DWR ID	DWR_RD1	602_01_s _ 201	9_58						
		Comn	nent Cod	le					
		grass and wee	ds on th	e levee slo <sub>l</sub>	oes a	and			
easements	S								
	Inspector Comment								

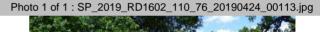
No Photos

LM Start	3.68	Rating **	U	Issue No.		76
LM End	3.92	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory			Start		End	
Item	Vegetatio	n		37.4563	37°	37.453342 °
item				-121.0443	34 °	-121.042219 °
DWR ID	DWR_RD1	602_01_s _ 201	9_76			

#### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment





View of landside slope looking downstream. (Spring 2019)

LM Start	3.76	Rating **	М	Issue No.		83		
LM End	3.76	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Encroachments			37.4554	14°	37.455414 °		
пеш			-121.0437	65 °	-121.043765 °			
DWR ID DWR_RD1602_01_s _ 2017_83								

TR : Tree or limb

Inspector Comment

Comment Code



View of a tree trunk on the waterside slope of the levee.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicab	e A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.82	Rating **	М	Issue No.		66		
LM End	3.92	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroach	ments		37.45461	l1°	37.453309°		
пеш			-121.04319	93 °	-121.042191 °			
DWR ID DWR_RD1602_01_f _ 2013_66								
	Comment Code							

FE : Fence

Inspector Comment

Fence, animal pen and other encroachments at landward toe.





Fences were found on the landside toe of the levee looking upstream.

Photo 2 of 3: SP\_2019\_RD1602\_110\_66\_20190307\_00041.jpg



Looking southwest at animal pens and other enroachments on landward toe. (Spring 2018)

Photo 3 of 3: SP\_2019\_RD1602\_110\_66\_20190307\_00042.jpg

LM Start	3.82	Rating **	М	Issue No.	66 (cont)
LM End	3.92	Issue Type +	En	Location *	LS



Looking northwest at fence at landward toe. (Spring 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.82	Rating **	М	Issue No.		42			
LM End	3.82	Issue Type +	En	Location *		LS			
Earthen Levee				GPS La	atitud	e/Longitude			
Category				Start		End			
Item	Vegetatio	n		37.4545	74°	37.454574°			
пеш				-121.043142 °		-121.043142°			
DWR ID	DWR ID DWR_RD1602_01_s _ 2012_42								
		Comn	nent Cod	le					
V6 : Lands	caping								
		Inspecto	or Comm	ent					
Cactus on	Cactus on landside slope								

Photo 1 of 1: SP\_2019\_RD1602\_110\_42\_20190307\_00019.jpg



Remove landscaping from within 10' of landside toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.86	Rating **	М	Issue No.		207
LM End	3.86	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		37.4540	97°	37.454097 °
Item				-121.0428	10°	-121.042810 °
DWR ID	20206					

#### Comment Code

#### Inspector Comment

FS\_ID:53523 DS\_ID:20206 EP\_NO: 7796

Repair Type: Non-Urgent Crossing Status: Indicator Found

FS Date: 10/19/2018 10:26:00 AM

UCIP Comments: 10/19/2018 Pipe section through the WS ramp was exposed during the 2017 storms. According to LMA representative. adjacent property owner has backfilled the pipe with soil to avoid damage to line. Contacted Mr. Chris Williams with PG&E and Mr. Williams mentioned that PG&E is planning to abandon the line and install a new line. The new line will be bored through the levee. Mr. Williams also mentioned that the line was inspected in 2016-17 and was found to be functional. However, due to the pipe exposure in 2017 PG&E has decided to abandon the current line. PG&E is working with the CVFPB to obtain the proper permits and complete the final design for the new line. This crossing has been downgraded from Urgent to Non-Urgent due to the updated UCIP reclassification evaluations. Pending action for this crossing includes line abandonment documentation from CVFPB and closeout files for this crossing. Primary PG&E contact for this crossing is Carlos Carbrera, Stanislaus and San Joaquin PG&E Local Engineer. He can be reached at 1-925-789-0509 or by email at c4ch@pge.com. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection crossing is missing markers visible from levee crown. PG&E completed some construction work on this line from September - November 3rd, 2016 and installed a marker on WS approxiamtely 341 feet from levee crown. UCIP inspector will need to contact Mr. Chris Williams, Associate Construction Specialist, Gas Construction Management Central Valley Region with PG&E at 1-209-272-2811 to determine extent of inspection through levee. (O. Magana - DWR UCIP)10/01/2013 Gasline needs sign markers at levee. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 12.75-inch gas line crossing through levee, 3 feet below crown. Gas line is near Prune Avenue and Paradise Avenue. For emergencies call PG&E at 1-800-811-4111. (12.75-inch line authorized under Permit No. 7796, 1972 - Pacific Gas and Electric Company [PG&E], related permits include Permit No. 7796-A issued to amend plans to allow installing gas line under river by boring method, and Permit No. 7796-B issued to modify condition no. 18 by allowing work before July 20, 1972) [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 3.90), Drawing No. 7-4-1784].

#### Photo 1 of 3: UCIP\_SP\_2019\_53523\_76534.jpg



Overview of levee crown at pipe crossing.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.86	Rating **	М	Issue No.	:	207 (cont)
LM End	3.86	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory	ory			Start		End
Item	DWR UC	IP Field Study		37.45409	7 °	37.454097 °
пеш				-121.04281	0 °	-121.042810 °
DWR ID	20206					

#### Comment Code

#### Inspector Comment

FS ID:53523 DS\_ID:20206 EP NO: 7796

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 10/19/2018 Pipe section through the WS ramp was exposed during the 2017 storms. According to LMA representative, adjacent property owner has backfilled the pipe with soil to avoid damage to line. Contacted Mr. Chris Williams with PG&E and Mr. Williams mentioned that PG&E is planning to abandon the line and install a new line. The new line will be bored through the levee. Mr. Williams also mentioned that the line was inspected in 2016-17 and was found to be functional. However, due to the pipe exposure in 2017 PG&E has decided to abandon the current line. PG&E is working with the CVFPB to obtain the proper permits and complete the final design for the new line. This crossing has been downgraded from Urgent to Non-Urgent due to the updated UCIP reclassification evaluations. Pending action for this crossing includes line abandonment documentation from CVFPB and closeout files for this crossing. Primary PG&E contact for this crossing is Carlos Carbrera, Stanislaus and San Joaquin PG&E Local Engineer. He can be reached at 1-925-789-0509 or by email at c4ch@pge.com. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection crossing is missing markers visible from levee crown. PG&E completed some construction work on this line from September - November 3rd, 2016 and installed a marker on WS approxiamtely 341 feet from levee crown. UCIP inspector will need to contact Mr. Chris Williams, Associate Construction Specialist, Gas Construction Management Central Valley Region with PG&E at 1-209-272-2811 to determine extent of inspection through levee. (O. Magana - DWR UCIP)10/01/2013 Gasline needs sign markers at levee. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 12.75-inch gas line crossing through levee, 3 feet below crown. Gas line is near Prune Avenue and Paradise Avenue. For emergencies call PG&E at 1-800-811-4111. (12.75-inch line authorized under Permit No. 7796, 1972 - Pacific Gas and Electric Company [PG&E], related permits include Permit No. 7796-A issued to amend plans to allow installing gas line under river by boring method, and Permit No. 7796-B issued to modify condition no. 18 by allowing work before July 20, 1972) [Additional Reference(s): DWR Levee Log. 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 3.90), Drawing No. 7-4-1784]. FS Date: 10/19/2018 10:26:00 AM





View of LS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.86	Rating **	М	Issue No.		207 (cont)	
LM End	3.86	Issue Type +	En	Location *			
Category			GPS La	titud	e/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study	,	37.45409	)7°	37.454097	0
пеш				-121.04281	0 °	-121.042810	0
DWR ID	20206						

#### Comment Code

#### Inspector Comment

FS ID:53523 DS\_ID:20206 EP NO: 7796

Repair Type: Non-Urgent Crossing Status: Indicator Found

FS Date: 10/19/2018 10:26:00 AM

UCIP Comments: 10/19/2018 Pipe section through the WS ramp was exposed during the 2017 storms. According to LMA representative. adjacent property owner has backfilled the pipe with soil to avoid damage to line. Contacted Mr. Chris Williams with PG&E and Mr. Williams mentioned that PG&E is planning to abandon the line and install a new line. The new line will be bored through the levee. Mr. Williams also mentioned that the line was inspected in 2016-17 and was found to be functional. However, due to the pipe exposure in 2017 PG&E has decided to abandon the current line. PG&E is working with the CVFPB to obtain the proper permits and complete the final design for the new line. This crossing has been downgraded from Urgent to Non-Urgent due to the updated UCIP reclassification evaluations. Pending action for this crossing includes line abandonment documentation from CVFPB and closeout files for this crossing. Primary PG&E contact for this crossing is Carlos Carbrera, Stanislaus and San Joaquin PG&E Local Engineer. He can be reached at 1-925-789-0509 or by email at c4ch@pge.com. (O. Magana - DWR UCIP)11/18/2016 Same as previous inspection crossing is missing markers visible from levee crown. PG&E completed some construction work on this line from September - November 3rd, 2016 and installed a marker on WS approxiamtely 341 feet from levee crown. UCIP inspector will need to contact Mr. Chris Williams, Associate Construction Specialist, Gas Construction Management Central Valley Region with PG&E at 1-209-272-2811 to determine extent of inspection through levee. (O. Magana - DWR UCIP)10/01/2013 Gasline needs sign markers at levee. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 12.75-inch gas line crossing through levee, 3 feet below crown. Gas line is near Prune Avenue and Paradise Avenue. For emergencies call PG&E at 1-800-811-4111. (12.75-inch line authorized under Permit No. 7796, 1972 - Pacific Gas and Electric Company [PG&E], related permits include Permit No. 7796-A issued to amend plans to allow installing gas line under river by boring method, and Permit No. 7796-B issued to modify condition no. 18 by allowing work before July 20, 1972) [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 3.90), Drawing No. 7-4-1784].

### Photo 3 of 3: UCIP\_SP\_2019\_53523\_76536.jpg



PVC riser with yellow cover located along fence on LS.

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.87	Rating **	U	Issue No.		90
LM End	3.87	Issue Type +	En	Location *		WS
0-4	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroach	ments		37.4540	004°	37.454004°
пеш				-121.0427	'24 °	-121.042724 °
DWR ID DWR_RD1602_01_s _ 2019_90						
		Comn	nent Cod	le		
TR : Tree	or limb					
		Inspecto	or Comm	nent		
Fallen tree on waterside slope.						



Fallen tree trunk on waterside slope. (Spring 2019)

LM Start	3.90	Rating **	A/W	Issue No.		18	
LM End		Issue Type +	Ob	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Calegory		Start		End		
Item	2017 Stor	m Damage		37.45362	o°		0
пеш				-121.04241	o°		0
DWR ID DWR_RD1602_01_f _ 2017_18							
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:118

Site Designation:190-FOC-1

Repair Type: Seepage

Rating: Field Date: Notes: No Photos

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.90	Rating **	М	Issue No.		84
LM End	3.90	Issue Type +	Ма	Location *		WS
Earthen Levee				GPS Latitude/Longitude		
Category			Start		End	
Item	Animal Co	ontrol		37.45356	66°	37.453566
пеш			-121.04237	76°	-121.042376	
DWR ID DWR_RD1602_01_s _ 2017_84						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of rodent holes on the waterside of the levee.

LM Start	3.93	Rating **	М	Issue No.		85	
LM End	3.96	Issue Type +	Ma	Location *		CR	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item		rface / Depres	37.4532	33 °	37.452931 °		
ILEIII	Rutting			-121.0421	17°	-121.041863 °	
DWR ID	DWR_RD1	602_01_s _ 201	7_85				

Comment Code

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

No Photos

LM Start	3.93	Rating **	М	Issue No.		62	
LM End	3.93	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		37.4532	16°	37.453216	0
iteiii				-121.0421	27 °	-121.042127	0
DWR ID	DWR_RD1	602_01_s _ 201	2_62				

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Significant damage to USACE constructed seepage berm due to human activity.

#### Photo 1 of 1: SP\_2019\_RD1602\_110\_62\_20190307\_00036.jpg



Repair damage to USACE constructed seepage berm by pedestrian and cycle traffic.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	3.94	Rating **	М	Issue No.		63	
LM End	4.04	Issue Type +	En	Location *		LS	
Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Encroach	ments		37.4529	83°	37.451866 °	
пеш	-121.042301 ° -121.04					-121.041206 °	
DWR ID	DWR_RD1	602_01_s _ 201	2_63				
		Comn	nent Cod	le			
FE : Fence	)						
		Inspecto	or Comm	nent			
New fence	New fence on landward slope.						

LM Start	3.94	Rating **	М	Issue No.	63 (cont)
LM End	4 04	Issue Type +	Fn	Location *	LS



View of a barbed wire fence on the landward slope looking upstream.

Photo 2 of 2: SP\_2019\_RD1602\_110\_63\_20190307\_00038.jpg



Looking upstream at new fence on landward slope. (Spring 2018)

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.03	Rating **	A/W	Issue No.		21	
LM End		Issue Type +	Ob	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start				End	
Itom	2017 Stor	m Damage		37.45199	0°		0
пеш	Item -121.04						0
DWR ID DWR_RD1602_01_f _ 2017_21							
		Comn	nent Cod	le			

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:119

Site Designation:190-FOC-2 Repair Type: Seepage

Rating: Field Date: Notes:

LM Start

LM End

Category

Item

_							
	4.04	Rating **	М	Issue No.		74	
	4.16	Issue Type +	Ма	Location *		LS	
	Earthen L	evee		GPS La	atitud	le/Longitude	
				Start		End	

37.451892°

-121.041168 °

37.450563 °

-121.039725

DWR ID DWR\_RD1602\_01\_s \_ 2019\_74

**Animal Control** 

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

No Photos

\* Location LS: Land Side N/A: Not Applicable WS: Water Side CR : Crown

Rating A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.13	Rating **	A/W	Issue No.		23
LM End	4.45	Issue Type +	Ob	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory			Start End			
Item	2017 Stor	m Damage		37.450930°		37.446820°
пеш				-121.03999	o°	-121.037840 °
DWR ID DWR_RD1602_01_f _ 2017_23						
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:120

Site Designation:190-101 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Rating \*\* Issue No. 4.22 M 73 LM Start 4.22 Issue Type + Ма Location \* WS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 37.449814° 37.449814° -121.039112 ° -121.039112 ° DWR ID DWR\_RD1602\_01\_s \_ 2019\_73 Comment Code

TR : Tree or limb

Inspector Comment

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.38	Rating **	М	Issue No.		71	
LM End	4.38	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Category			Start		End		
Item	Animal Co		37.4477	61 °	37.447761 °		
Item				-121.0378	45 °	-121.037845 °	
DWR ID	DWR_RD1	602_01_s _ 201	9_71				
		Comn	nent Cod	le			
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.							
		Inspecto	or Comm	ent			

No Photos

LM Start	4.42	Rating **	М	Issue No.		67	
LM End	4.88	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory						End	
Item	Encroach	ments		37.4472	13°	37.441014°	
iteiii				-121.0376	65 °	-121.036932 °	
DWR ID	DWR_RD1	602_01_s _ 201	2_67				

Comment Code

FE : Fence

Inspector Comment





View of the fence on the landside toe of the levee. The picture was taken from the crown looking upstream.

LM Start	4.46	Rating **	М	Issue No.		55	
LM End	4.83	Issue Type +	Ma	Location *	LS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory				Start		End	
Itom	Vegetation			37.4465	98°	37.441663	0
Item				-121.0379	34°	-121.036559	0
DWR ID	DWR_RD1	WR_RD1602_01_s _ 2019_55					
		Comn	nent Coc	le			

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location		** Rating		+ Issue Type
LS : Land S	ide N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water	Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.47	Rating **	М	Issue No.		208
LM End	4.47	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UC	IP Field Study		37.4465	45 °	37.446545 °
пеш				-121.0379	41 °	-121.037941 °
DWR ID	20207					

#### Comment Code

#### Inspector Comment

FS\_ID:51332 DS\_ID:20207 EP\_NO: 8195

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 60-inch riser has a temporary cover therefore crossing has been downgraded from Urgent to Non-Urgent. (O. Magana - DWR UCIP) 10/01/2013 Lid missing from 60-inch CMP riser, may be an attractive nuissance or hazard to public. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 18-inch steel pipe through levee, 10 feet below crown. Slide gate in 60-inch corrugated metal pipe riser located on the waterside (WS) slope. Concrete discharge box is located on landside (LS) end. Pipe is buried across WS berm to pump located on the riverbank approximately 1,000 feet from the levee. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 8195, 1972 - Larry Buehner). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 4.51), Drawing No. 7-4-1784].

FS Date: 11/18/2016

LM Start	4.47	Rating **	М	Issue No.	208 (cont)
LM End	4.47	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_51332\_36819.jpg



Slide gate in CMP riser on WS slope.

#### Photo 2 of 3: UCIP\_SP\_2019\_51332\_36818.jpg



Slide gate in CMP riser on WS slope.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.47	Rating **	М	Issue No.	:	208 (cont)
LM End	4.47	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory		Start		End		
Item	DWR UC	IP Field Study		37.44654	5°	37.446545 °
пеш				-121.03794	1°	-121.037941 °
DWR ID	20207					

#### Comment Code

#### Inspector Comment

FS\_ID:51332 DS\_ID:20207 EP\_NO: 8195

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 60-inch riser has a temporary cover therefore crossing has been downgraded from Urgent to Non-Urgent. (O. Magana - DWR UCIP) 10/01/2013 Lid missing from 60-inch CMP riser, may be an attractive nuissance or hazard to public. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 18-inch steel pipe through levee, 10 feet below crown. Slide gate in 60-inch corrugated metal pipe riser located on the waterside (WS) slope. Concrete discharge box is located on landside (LS) end. Pipe is buried across WS berm to pump located on the riverbank approximately 1,000 feet from the levee. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 8195, 1972 - Larry Buehner). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 4.51), Drawing No. 7-4-1784].

FS Date: 11/18/2016



Concrete ditch at outlet from pipe on LS toe.

LM Start	4.47	Rating **	M	Issue No.		64		
LM End	4.74	Issue Type +	En	Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude				
Category				Start		End		
Item	Encroach	ments	37.446485 °		37.442772 °			
item			-121.038037 °		-121.037196 °			
DWR ID	DWR_RD1	602_01_s _ 201	2_64					
		Comn	nent Cod	le				
DT : Ditch								
	Inspector Comment							

Photo 1 of 1 : SP_2019_RD1602_110_64_20190307_00039.jpg
10/24/2014

View of a ditch on the landside toe of the levee looking upstream.

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.48	Rating **	М	Issue No.		65			
LM End	4.82	Issue Type +	Ma	Location *		CR			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory			Start		End				
Vegetation				37.4464	03 °	37.441834 °			
item				-121.037892 °		-121.036568 °			
DWR ID	DWR_RD1	602_01_s _ 201	9_65						
		Comn	nent Cod	de					
V9 : Keep	the crown	roadway free	of veget	ation.					
	Inducator Commant								
Inspector Comment									

No Photos

LM Start	4.49	Rating **	U	Issue No.		69	
LM End	4.49	Issue Type +	Ma	Location *	* WS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Encroach	Encroachments			78°	37.446178	0
nem		-121.0378	55 °	-121.037855	0		
DWR ID	DWR_RD1	DWR RD1602 01 s 2019 69					

#### Comment Code

TR : Tree or limb

Inspector Comment



View of fallen tree trunk on waterside slope. (Spring 2019)

LM Start	4.55	Rating **	М	Issue No.		91	
LM End	4.55	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Animal Co	Animal Control			)2 °	37.445402 °	
пеш			-121.03770	06°	-121.037706°		
DWR ID	DWR_RD1602_01_s _ 2017_91						

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Holes in waterside slope and both the waterside and landside shoulders.



View of rodent holes on the waterside of the levee looking downstream. Spring 2017

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.83	Rating **	U	Issue No.		25		
LM End	5.90	Issue Type +	Ma	Location *		CR		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory						End		
Item	Vegetatio	n		37.44166	62°	37.432837°		
пеш				-121.0365	59°	-121.026169°		
DWR ID	DWR_RD1602_01_s _ 2019_25							
	Comment Code							

Comment Code

V9 : Keep the crown roadway free of vegetation.

#### Inspector Comment





View of vegetation on levee crown looking downstream. (Spring 2019)

LM Start	4.83	Rating **	U	Issue No.		75
LM End	5.93	Issue Type +	Ма	Location *	WS	
Earthen Levee				GPS Latitude/Longitude		
Category			Start		End	
Item	Vegetatio	n		37.4416	61 °	37.432447 °
item			-121.0365	58°	-121.026391 °	
DWR ID	DWR RD1602 01 s 2012 75					

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

LM Start	4.83	Rating **	U	Issue No.	75 (cont)
LM End	5.93	Issue Type +	Ma	Location *	WS

Photo 1 of 3: SP\_2019\_RD1602\_110\_75\_20190424\_00116.jpg



View of wasterside slope looking upstream. (Spring 2019)

Photo 2 of 3: SP\_2019\_RD1602\_110\_75\_20190307\_00045.jpg



dense vegetation on waterside slope. (Fall 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

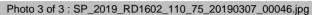
Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	4.83	Rating **	U	Issue No.		75 (cont)
LM End	5.93	Issue Type +	Ма	Location * WS		WS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetatio	n		37.44166	î1°	37.432447°
пеш			-121.03655	8°	-121.026391 °	
DWR ID	DWR ID DWR_RD1602_01_s _ 2012_75					
Comment Code						

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment





Looking at upstream at dense vegatation on waterward slope. (Spring 2018)

LM Start	4.83 Rating ** U		Issue No.		61	
LM End	6.22	Issue Type +	Ma	Location *		LS
Category	Earthen L		GPS Latitude/Longitude			
Calegory				Start		End
Item	Vegetatio	Vegetation			60°	37.429165 °
пеш				-121.0365	58°	-121.029682 °
DWR ID	DWR_RD1602_01_s _ 2012_61					

#### Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

LM Start	4.83	Rating **	U	Issue No.	61 (cont)
LM End	6.22	Issue Type +	Ma	Location *	LS

#### Photo 1 of 2: SP\_2019\_RD1602\_110\_61\_20190424\_00117.jpg



View of landside slope looking downstream. (Spring 2019)

Photo 2 of 2: SP\_2019\_RD1602\_110\_61\_20190307\_00035.jpg



Vegetation was obstructing the view of the landside of the levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.08	Rating **	М	Issue No.	89		
LM End	5.13	Issue Type +	Ma	Location *	LS		
Category	Cotogon Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Slope Sta	bility	ility		49°		٥
пеш				-121.03710	00°		٥
DWR ID	DWR_RD1	602_01_f _ 201	8_89				
		Comn	nent Cod	le			
S3 : Repai access wh		slope damag le.	ed by ve	hicle traffic	and	l prevent	

Inspector Comment

Damage to slope appears to be from vehicle traffic.

LM Start	5.08	Rating **	М	Issue No.	89 (cont)
LM End	5.13	Issue Type +	Ma	Location *	LS



View along landside slope looking upstream. (Fall 2018)

Photo 2 of 2: SP\_2019\_RD1602\_110\_89\_20190307\_00057.jpg



Upclose view of some of the damage to slope. (Fall 2018)

Photo 1 of 1: SP\_2019\_RD1602\_110\_199\_20190307\_00067.jpg

LM Start	5.09	Rating **	М	Issue No.		199
LM End	5.09	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	le/Longitude	
Category				Start		End
Item	Animal Co	ontrol		37.4381	65 °	37.438165°
пеш				-121.0370	73 °	-121.037073 °
DWR ID	DWR_RD1	602_01_s _ 201	4_199			
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and						

Inspector Comment



Rodent holes were found on the waterside toe of the levee looking upstream.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.13	Rating **	М	Issue No.		92
LM End	5.13	Issue Type +	Ма	Location * WS		WS
Category	Earthen L	evee		GPS Latitude/Longitude		
Calegory				Start End		
Item	Animal Co	ontrol		37.43752	27°	37.437527°
пеш			-121.03696	67°	-121.036967 °	
DWR ID	DWR_RD1	602_01_s _ 201	7_92			·

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment



View of a rodent hole on the waterside shoulder of the levee looking downstream.

LM Start	5.18	Rating **	U	Issue No.		48	
LM End	5.18	Issue Type +	Ma	Location *		WS	
Catagoria Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		37.4367	85°	37.436785	0
пеш				-121.0365	93 °	-121.036593	0
DWR ID	DWR_RD1	602_01_s _ 201	6_48				

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Rodent holes possibly worsen by dogs.

#### Photo 1 of 1: SP\_2019\_RD1602\_110\_48\_20190307\_00024.jpg



View of rodent holes on the waterside of the levee looking downstream.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.19	Rating **	М	Issue No.		209	
LM End	5.19	Issue Type +	Ma	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	37.4367	48 °	37.436748 °	
пеш				-121.0365	97 °	-121.036597°	
DWR ID	20208						

#### Comment Code

#### Inspector Comment

FS\_ID:51336 DS\_ID:20208 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Same as previous inspection soil and debris prevent flap gate from properly fuctioning and slide gate won't close due to sediment build up. Crossing has been downgraded from Urgent to Non-Urgent due to no pipe or levee integrity issues observed during the site visit. Need to contact owner to determine status of crossing. If crossing is no longer in use owner will need to coordinate with CVFPB to properly abandon or remove according to Title 23 requirements. (O. Magana - DWR UCIP)10/01/2013 Soil and debris prevent flapgate from proper function. Slide gate won't close completely due to sediment buildup. CMP riser needs cover. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 24-inch steel pipe through levee, 11.6 feet below crown. Concrete headwall on the landside (LS) end. Concrete "U" headwall and flap gate located on the waterside (WS) end. Slide gate in 60-inch corrugated metal pipe (CMP) riser is located on the WS slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.23), Drawing No. 7-4-1784].

FS Date: 11/18/2016

LM Start	5.19	Rating **	М	Issue No.	209 (cont)
LM End	5 19	Issue Type +	Ma	Location *	



Slide gate in CMP riser on WS slope. Outlet visible under tree in background.

#### Photo 2 of 3: UCIP\_SP\_2019\_51336\_36821.jpg



Flapgate in Concrete headwall on WS toe under tree.

Location Rating Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.19	Rating **	М	Issue No.		209 (cont)
LM End	5.19	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lati	tud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.43674	3°	37.436748°
пеш				-121.03659	7 °	-121.036597 °
DWR ID	20208					

#### Comment Code

#### Inspector Comment

FS\_ID:51336 DS\_ID:20208 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Same as previous inspection soil and debris prevent flap gate from properly fuctioning and slide gate won't close due to sediment build up. Crossing has been downgraded from Urgent to Non-Urgent due to no pipe or levee integrity issues observed during the site visit. Need to contact owner to determine status of crossing. If crossing is no longer in use owner will need to coordinate with CVFPB to properly abandon or remove according to Title 23 requirements. (O. Magana - DWR UCIP)10/01/2013 Soil and debris prevent flapgate from proper function. Slide gate won't close completely due to sediment buildup. CMP riser needs cover. (W. Wylie - DWR UCIP)

FIÉLD\_STRUCT\_DESC: 24-inch steel pipe through levee, 11.6 feet below crown. Concrete headwall on the landside (LS) end. Concrete "U" headwall and flap gate located on the waterside (WS) end. Slide gate in 60-inch corrugated metal pipe (CMP) riser is located on the WS slope. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.23), Drawing No. 7-4-1784].

FS Date: 11/18/2016

# Photo 3 of 3: UCIP\_SP\_2019\_51336\_36820.jpg

Concrete headwall at intlet on LS toe.

LM Start	5.21	Rating **	U	Issue No.	40			
LM End	5.21	Issue Type +	Ma	Location *	CR			
Cotogon Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Repair Ga	ates		37.43648	8 °	37.436488	0	
item				-121.03636	4 °	-121.036364	0	
DWR ID DWR_RD1602_01_f _ 2018_40								
	Comment Code							

#### Inspector Comment

Unable to access through gate. None of the keys provided work with lock. LMA does not have key either

#### Photo 1 of 1: SP\_2019\_RD1602\_110\_40\_20190307\_00018.jpg



DWR and LMA do not have keys for locks on gate. (Fall 2018)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.22	Rating **	М	Issue No.		52
LM End	5.22	Issue Type +	Ma	Location *		WS
Category	Earthen Levee			GPS La	atituc	le/Longitude
Calegory			Start		End	
Item	Animal Co	ontrol		37.4363	93 °	37.436393°
item			-121.0362	96°	-121.036296°	
DWR ID DWR_RD1602_01_s _ 2018_52						

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Large rodent hole on waterward slope.

#### Photo 1 of 1 : SP\_2019\_RD1602\_110\_52\_20190307\_00028.jpg



Looking at rodent hole and erosion around rodent hole on waterward slope.

LM Start	5.23	Rating **	A/W	Issue No.		210	
LM End	5.23	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	37.4362	46 °	37.436246 °	
item				-121.0361	93 °	-121.036193 °	
DWR ID	DWR ID 20209						
Comment Code							

#### Inspector Comment

FS\_ID:21665 DS\_ID:20209 EP\_NO: 8192

Repair Type: No Action Needed

Crossing Status: Found

UCIP Comments:

FS Date: 10/1/2013

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch by 36-inch reinforced concrete box drainage culvert through the levee, 15.8 feet below the crown. Slide gate in a 6-foot by 7-foot concrete surge box on the waterside (WS) slope. 36-inch concrete pipes buried on both sides of the levee and connected to the reinforced concrete box culvert. Constructed through the levee section. (two 36-inch by 36-inch culvert [HLM 5.27] authorized under Automatic Board Order (ABO) issued as Permit No. 8192, 1972 - Stanislaus County). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.27), Drawing No. 7-4-1784].

Photo 1 of 2: UCIP SP 2019 21665 36829.jpg



Shed with slide gate in Concrete riser on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.23	Rating **	A/W	Issue No.		210 (cont)
LM End	5.23	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory						End
Item	DWR UC	IP LMA Respo	onsibility	37.43624	6°	37.436246 °
пеш			-121.03619	3°	-121.036193 °	
DWR ID	20209					

# Comment Code Inspector Comment

FS\_ID:21665 DS\_ID:20209 EP\_NO: 8192

Repair Type: No Action Needed Crossing Status: Found UCIP Comments:

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch by 36-inch reinforced concrete box drainage culvert through the levee, 15.8 feet below the crown. Slide gate in a 6-foot by 7-foot concrete surge box on the waterside (WS) slope. 36-inch concrete pipes buried on both sides of the levee and connected to the reinforced concrete box culvert. Constructed through the levee section. (two 36-inch by 36-inch culvert [HLM 5.27] authorized under Automatic Board Order (ABO) issued as Permit No. 8192, 1972 - Stanislaus County). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.27), Drawing

No. 7-4-1784]. FS Date: 10/1/2013



Likely risers for pipe off LS toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.23	Rating **	A/W	Issue No.		211
LM End	5.23	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.43622	27°	37.436227 °
пеш			-121.03616	9°	-121.036169°	
DWR ID	20222					

#### Comment Code

#### Inspector Comment

FS\_ID:21668 DS\_ID:20222 EP\_NO: 8192

Repair Type: No Action Needed Crossing Status: Found UCIP Comments:

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch by 36-inch reinforced concrete box drainage culvert through the levee, 15.8 feet below the crown. Slide gate in a 6-foot by 7-foot concrete surge box on the waterside (WS) slope. 36-inch concrete pipes buried on both sides of the levee and connected to the reinforced concrete box culvert. Constructed through the levee section. (two 36-inch by 36-inch culvert [HLM 5.27] authorized under Automatic Board Order (ABO) issued as Permit No. 8192, 1972 - Stanislaus County). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.27), Drawing No. 7-4-1784].

 LM Start
 5.23
 Rating \*\*
 A/W
 Issue No.
 211 (cont)

 LM End
 5.23
 Issue Type +
 Ma
 Location \*



Slide gate in Concrete vault on WS shoulder.

#### Photo 2 of 2: UCIP\_SP\_2019\_21668\_36834.jpg



Possible concrete risers for pipe off LS toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.24	Rating **	A/W	Issue No.		212
LM End	5.24	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.43612	9°	37.436129°
пеш				-121.03606	5 °	-121.036065 °
DWR ID	20210					

#### Comment Code

#### Inspector Comment

FS\_ID:21672 DS\_ID:20210 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found UCIP Comments:

FIELD\_STRUCT\_DESC: 30-inch by 30-inch reinforced concrete box drainage culvert through the levee, 12.9 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) slope. Concrete discharge boxes on both ends. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 5.28), Drawing No. 7-4-1784].

FS Date: 10/1/2013

LM Start	5.24	Rating **	A/W	Issue No.	212 (cont)
LM End	5.24	Issue Type +	Ma	Location *	





Slidegate in concrete riser on WS shoulder.

#### Photo 2 of 3: UCIP\_SP\_2019\_21672\_36847.jpg



Concrete outlet on WS toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.24	Rating **	A/W	Issue No.	212 (cont)	
LM End	5.24	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Calegory			Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.43612	9°	37.436129°
пеш				-121.03606	5°	-121.036065 °
DWR ID	20210					

#### Inspector Comment

Comment Code

FS\_ID:21672 DS\_ID:20210 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found UCIP Comments:

FIELD\_STRUCT\_DESC: 30-inch by 30-inch reinforced concrete box drainage culvert through the levee, 12.9 feet below the crown. Slide gate in a concrete surge box on the waterside (WS) slope. Concrete discharge boxes on both ends. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM

Rating \*\*

5.28), Drawing No. 7-4-1784].

FS Date: 10/1/2013

LM Start 5.24



Concrete inlet on LS toe.

	LIVI Otalit	0.27		_			0 <b>-</b>		
	LM End	5.35	Issue Type +	En	Location *		LS		
	Category Earthen Levee				GPS Latitude/Longitude				
					Start		End		
	Item	Encroach	ments	37.4360	99°	37.434760	٥		
	item				-121.0360	02 °	-121.035092	0	
	DWR ID	DWR_RD1	602_01_s _ 201	8_82					
			Comn	nent Cod	le				
	MA : Mater	rial							

C

Issue No

82

#### Inspector Comment

Farmer or Landowner piled earthen material against landward toe.

No Photos

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.27	Rating **	М	Issue No.		41	
LM End	5.27	Issue Type +	Ma	Location *		WS	
Catagoni	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Trim / Thi	n Trees		37.4358	34°	37.435834 °	
пеш				-121.0356	15 °	-121.035615 °	
DWR ID	DWR ID DWR_RD1602_01_s _ 2019_41						
		Comn	nent Cod	le			
T1: Trim t	rees to at l	east five feet	above g	round level.			
		Inspecto	or Comm	nent			

No Photos

LM Start	5.32	Rating **	М	Issue No.		35
LM End	5.32	Issue Type +	En	Location *		WS
Catagoni Earthen Levee			GPS La	titud	e/Longitude	
Category				Start		End
Item	Encroach	ments		37.43523	85 °	37.435235°
пеш			-121.03528	80 °	-121.035280 °	
DWR ID DWR_RD1602_01_s _ 2019_35						
Comment Code						

Comment Code

TR : Tree or limb

Inspector Comment

No Photos

LM Start	5.38	Rating **	М	Issue No.	22	
LM End	5.44	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS La	titud	le/Longitude	
Category				Start		End
Item	Encroach	ments		37.4344	47 °	37.433791 °
пеш				-121.0348	65 °	-121.034000 °
DWR ID DWR_RD1602_01_f _ 2012_22						
Comment Code						

FE : Fence

Inspector Comment

## Photo 1 of 1 : SP\_2019\_RD1602\_110\_22\_20190307\_00005.jpg



A fence was found on the landside toe of the levee looking upstream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.46	Rating **	М	Issue No.		213
LM End	5.46	Issue Type +	ue Type + Ma		Location *	
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	37.43364	6°	37.433646 °
пеш				-121.03384	6°	-121.033846 °
DWR ID	20211					

#### Comment Code

#### Inspector Comment

FS\_ID:21674 DS\_ID:20211 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/01/2013 Pipe appears abandoned and if so

should be done so properly. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: \*ABANDÓNED\* 12-inch drainage pipe of an unknown material through the levee, 6.9 feet below the crown. Flap gate on the waterside (WS) end. Could not locate, March 1984. (Reclamation District No. 1602). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM

5.50), Drawing No. 7-4-1784].

FS Date: 10/1/2013



Pipe and flapgate visible on WS toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.72	Rating **	М	Issue No.	214		
LM End	5.72	Issue Type +	Ма	Location *			
Supplemental				GPS La	titud	le/Longitude	
Calegory	Start					End	
Item	DWR UC	IP LMA Respo	onsibility	37.4330	03 °	37.433003°	
пеш				-121.0293	46 °	-121.029346°	
DWR ID	VR ID 20212						
	Comment Code						

#### Inspector Comment

FS\_ID:51337 DS\_ID:20212 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent flap gate is functional. Recommend clearing dense vegetation from WS and LS slopes. (O. Magana - DWR UCIP)10/01/2013 Flapgate has minor blockage preventing gate from fully closing. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 9 feet below crown. Slide gate in concrete surge box is located on the waterside (WS) slope. Concrete "U" headwalls are located on both the waterside (WS) and landside (LS) ends. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.28), Drawing No. 7-4-1784].

FS Date: 11/18/2016

LM Start	5.72	Rating **	М	Issue No.	214 (cont)
LM End	5.72	Issue Type +	Ma	Location *	



Slide gate in concrete riser on WS shoulder.

#### Photo 2 of 3: UCIP\_SP\_2019\_51337\_36877.jpg



Concrete U-shaped headwall on LS toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.72	Rating **	М	Issue No.		214 (cont)
LM End	5.72	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory	Category			Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.43300	3°	37.433003 °
item		-121.02934	s °	-121.029346 °		
DWR ID	20212					

#### Inspector Comment

Comment Code

FS ID:51337 DS\_ID:20212 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 11/18/2016 Crossing has been downgraded from Urgent to Non-Urgent flap gate is functional. Recommend clearing dense vegetation from WS and LS slopes. (O. Magana - DWR UCIP)10/01/2013 Flapgate has minor blockage preventing gate from fully closing. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 30-inch square reinforced concrete box culvert through levee, 9 feet below crown. Slide gate in concrete surge box is located on the waterside (WS) slope. Concrete "U" headwalls are located on both the waterside (WS) and landside (LS) ends. Flap gate is located on the WS end. [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin River O&M Manual Unit 13, April 1964, (HLM 5.28), Drawing No. 7-4-1784].

U

Ma

Issue No.

Location \*

Start

37.433081°

-121.027632 °

FS Date: 11/18/2016

5.81

5.81

Earthen Levee

Trim / Thin Trees

LM Start

LM End

Category

Item

DWR ID

# Photo 3 of 3: UCIP\_SP\_2019\_51337\_36876.jpg

Concrete U-shaped headwall on LS toe.

#### GPS Latitude/Longitude End 37.433081 ° -121.027632 °

34

WS

#### DWR\_RD1602\_01\_f \_ 2018\_34 Comment Code

Rating \*\*

Issue Type +

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment

#### Photo 1 of 1: SP\_2019\_RD1602\_110\_34\_20190307\_00013.jpg



trim tree to 5 feet above ground. (Fall 2018)

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1602 Del Puerto**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	5.86	Rating **	М	Issue No.		26		
LM End	5.86	Issue Type +	Ма	Location *		WS		
Catagony	Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End		
Item	Trim / Thin Trees			37.433142°		37.433142 °		
пеш				-121.026702 °		-121.026702 °		
DWR ID	DWR_RD1	602_01_f _ 201	8_26					
	Comment Code							
T1 : Trim trees to at least five feet above ground level.								

Inspector Comment

No Photos

LM Start	6.13	Rating **	U Issue No.			86		
LM End	6.13	Issue Type + Ma		Location *		Location *		WS
Catagony	Cotogon Earthen Levee				GPS Latitude/Longitude			
Category		Start		End				
Item	Vegetatio	getation			81 °	37.430181 °		
item			-121.028679 °		-121.028679 °			
DWR ID	DWR RD1	602 01 s 201	8 86					

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Cactus blocking view of waterward slope.

#### Photo 1 of 1: SP\_2019\_RD1602\_110\_86\_20190307\_00055.jpg



Looking south at dense cactus on waterward slope.

LM Start	6.23	Rating **	U	Issue No.		19	
LM End	6.23	Issue Type +	Ma	Location *	CR		
Category Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Repair Gates			37.4291	18°	37.429118 °	
пеш				-121.02974	49 °	-121.029749 °	
DWR ID DWR_RD1602_01_s _ 2019_19							
Comment Code							

#### Inspector Comment

Landowner replaced existing locks with own lock. Unable to access through gate.

#### Photo 1 of 1 : SP\_2019\_RD1602\_110\_19\_20190424\_00118.jpg



Landowner replaced existing LMA lock with their own lock. Unable to access through the gate.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	6.24	Rating **	М	Issue No.		215
LM End	6.24	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCIP Field Study			37.42903	32 °	37.429032 °
пеш				-121.02986	67°	-121.029867 °
DWR ID	20214					

#### Comment Code

#### Inspector Comment

FS\_ID:21683 DS\_ID:20214 EP\_NO: 8194

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/01/2013 Pipe heavily deteriated on LS toe. May indicate condition of rest of pipe is bad. Good candidate for video

inspection. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 18-inch reinforced concrete irrigation pipe through the levee, 3 feet below the crown. Slide gate in a 36-inch concrete standpipe on the waterside (WS) shoulder. (18-inch concrete pipe was authorized under Automatic Board Order (ABO) issued as Permit No. 8194, 1972 - Ernest F. Nunes). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April 1964, (HLM 6.28), Drawing No. 7-4-1784].

FS Date: 10/1/2013

LM Start	6.24	Rating **	М	Issue No.	215 (cont)
LM End	6.24	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_21683\_36882.jpg



Drainage/irrigation canal on LS toe.

#### Photo 2 of 3: UCIP\_SP\_2019\_21683\_36881.jpg



36-inch concrete standpipe on WS shoulder.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1602 Del Puerto

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.24	04/16/2019 04/16/2019	Corey Fujitani

LM Start	6.24	Rating **	M	Issue No.		215 (cont)
LM End	6.24	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.4290	32°	37.429032 °
				-121.02986	67°	-121.029867 °
DWR ID	20214					

#### Inspector Comment

Comment Code

FS\_ID:21683 DS\_ID:20214 EP\_NO: 8194

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/01/2013 Pipe heavily deteriated on LS toe. May indicate condition of rest of pipe is bad. Good candidate for video

inspection. (W. Wylie - DWR UCIP)

FIELD\_STRUCT\_DESC: 18-inch reinforced concrete irrigation pipe through the levee, 3 feet below the crown. Slide gate in a 36-inch concrete standpipe on the waterside (WS) shoulder. (18-inch concrete pipe was authorized under Automatic Board Order (ABO) issued as Permit No. 8194, 1972 - Ernest F. Nunes). [Additional Reference(s): DWR Levee Log, 1992. USACE San Joaquin O&M Manual 13, April

1964, (HLM 6.28), Drawing No. 7-4-1784].

FS Date: 10/1/2013



Pipe deteriated on LS at outlet.